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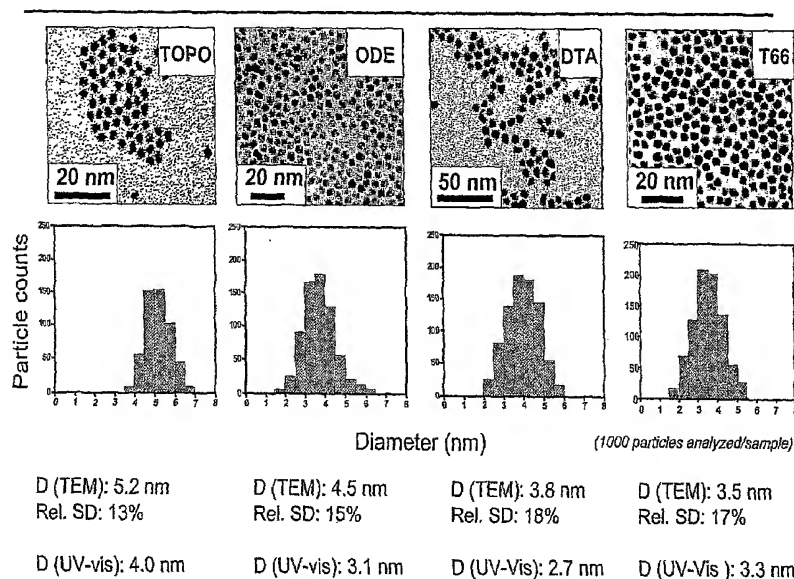
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(54) Title: METHODS AND MATERIALS FOR CDSE NANOCRYSTAL SYNTHESIS



(57) Abstract: New methods for the synthesis of nanocrystals/quantum dots are disclosed. The methods comprise use of reasonably-priced and commercially available heat transfer fluids (such as Dowtherm<sup>®</sup> A) as solvents to synthesize CdSe nanocrystals. Separation of nucleation and growth is achieved by quenching the reaction solution with relatively cold (room temperature) solvent to lower the solution temperature. Quenching may be followed by raising the solution temperature, to allow controlled growth to take place.

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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,045,930 (THOMPSON et al) 04 April 2000 (04.04.2000), disclosure, especially col. 4 -11.	1-46
A	US 6,232,264 B1 (LUKEHART et al) 15 May 2001 (15.05.2001), entire document	1-46
A	US 6,721,083 B2 (JACOBSON et al) 13 April 2004 (13.04.2004), column 34.	1-46
A	US 2003/0096113 A1 (JACOBSON et al) 22 May 2003 (22.05.2003), columns 6-7.	1-46

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☐ See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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